



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0797; Project Identifier MCAI-2021-00218-R; Amendment 39-21838; AD 2021-24-17]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Airbus Helicopters Deutschland GmbH Model EC135P1, EC135P2, EC135P2+, EC135P3, EC135T1, EC135T2, EC135T2+, and EC135T3 helicopters. This AD was prompted by reduced life limits being established for certain part-numbered tail rotor (TR) blades. This AD requires determining the total hours time-in-service (TIS) of certain part-numbered TR blades, establishing a life limit for certain part-numbered TR blades, removing from service any TR blade that has reached or exceeded its life limit, creating a component history card, re-identifying certain part-numbered TR blades, and removing any TR blade from service before reaching its retirement life. This AD also prohibits installing certain TR blades on certain model helicopters. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Airbus Helicopters, 2701 North Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>. You may view the

referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0797.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0797; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the European Union Aviation Safety Agency (EASA) AD, any comments received, and other information. The street address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Andrea Jimenez, Aerospace Engineer, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (516) 228-7330; email andrea.jimenez@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Deutschland GmbH Model EC135P1, EC135P2, EC135P2+, EC135P3, EC135T1, EC135T2, EC135T2+, and EC135T3 helicopters, with TR blade part number L642A2002101, L642A2002103, L642A2002104, L642A2002111, or L642A2002112 installed. The NPRM published in the *Federal Register* on September 23, 2021 (86 FR 52856). In the NPRM, the FAA proposed to require within 350 hours TIS, determining the total hours TIS of certain part-numbered TR blades and removing from service certain part-numbered TR blades that have accumulated or exceeded 6,800 total hours TIS. The NPRM also proposed to require for certain part-numbered TR blades with less than 6,800 total hours TIS, creating a component history card or equivalent record to establish a life limit of 6,800 total hours TIS, and removing these TR blades from service before accumulating 6,800 total hours

TIS. The NPRM proposed to require for certain model helicopters re-identifying certain part-numbered TR blades with new part numbers and removing those newly re-identified TR blades from service before exceeding 6,800 total hours TIS.

Additionally, the NPRM proposed to require for certain model helicopters with certain part-numbered TR blades installed that have been previously installed on certain model helicopters determining the total hours TIS of the TR blade in accordance with a method approved by the FAA or EASA. Finally, for certain model helicopters the NPRM proposed to prohibit installing certain part-numbered TR blades and for certain model helicopters the NPRM proposed to prohibit installing certain part-numbered TR blades that have exceeded or accumulated 500 total hours TIS while previously installed on certain model helicopters.

The NPRM was prompted by EASA AD 2021-0050, dated February 23, 2021 (EASA AD 2021-0050), issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for Airbus Helicopters Deutschland GmbH (AHD), formerly Eurocopter Deutschland GmbH, Eurocopter España S.A., Model EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, EC135 T3, EC635 P2+, EC635 P3, EC635 T1, EC635 T2+, and EC635 T3 helicopters, all variants, and all serial numbers. EASA advises that a reduced life limit has been established for certain part-numbered TR blades due to higher loads experienced in service. This condition, if not addressed, could result in fatigue and failure of a TR blade and loss of control of the helicopter.

Accordingly, EASA AD 2021-0050 requires determining the total hours TIS for certain part-numbered TR blades, recalculating the TIS for affected parts, and implementing a reduced life limit. EASA AD 2021-0050 also prohibits installing certain part-numbered TR blades and TR head assemblies and provides conditions for re-installation of certain TR blades.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these helicopters. Except for minor editorial changes, including removing Model EC635T2+ from paragraph (g)(5) of the Required Actions, this AD is adopted as proposed in the NRPM.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Airbus Helicopters Alert Service Bulletin ASB EC135H-04A-002 and Airbus Helicopters Alert Service Bulletin ASB EC135-04A-014, both Revision 1, and both dated December 21, 2020. This service information specifies procedures to determine the total hours TIS of certain TR blades and provides instructions to re-identify certain part-numbered TR blades.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Differences Between this AD and EASA AD 2021-0050

EASA AD 2021-0050 requires compliance using calendar time, whereas this AD requires compliance using hours TIS instead. EASA AD 2021-0050 applies to Model EC635 P2+, EC635 P3, EC635 T1, EC635 T2+, and EC635 T3 helicopters, which are not certificated by the FAA and are not included on the U.S. type certificate data sheet, except where the U.S. type certificate data sheet explains that the Model EC635 T2+ helicopter having serial number 0858 was converted from Model EC635 T2+ to Model EC135 T2+. This AD, therefore, does not include Model EC635 P2+, EC635 P3, EC635 T1, EC635 T2+, and EC635 T3 helicopters in the applicability. EASA AD 2021-0050 specifies contacting Airbus Helicopters Deutschland GmbH to determine the total hours TIS accumulated by certain TR blades whereas this AD requires determining the total hours TIS accumulated by the TR blade in accordance with a method approved by the

FAA or EASA. EASA AD 2021-0050 prohibits installing certain part-numbered TR head assemblies as defined in its AD, whereas this AD does not contain this prohibition.

Costs of Compliance

The FAA estimates that this AD affects 341 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this AD.

Determining the total hours TIS of each TR blade, updating the helicopter records and re-identifying each TR blade takes about 10 work-hours for each TR blade, for an estimated cost of \$850 per TR blade.

Replacing each TR blade takes about 10 work-hours and parts cost about \$4,400 for an estimated cost of \$5,250 per TR blade replacement.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Will not affect intrastate aviation in Alaska, and

(3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2021-24-17 Airbus Helicopters Deutschland GmbH: Amendment 39-21838; Docket No. FAA-2021-0797; Project Identifier MCAI-2021-00218-R.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Helicopters Deutschland GmbH Model EC135P1, EC135P2, EC135P2+, EC135P3, EC135T1, EC135T2, EC135T2+, and EC135T3 helicopters, certificated in any category, with tail rotor (TR) blade part number (P/N) L642A2002101, L642A2002103, L642A2002104, L642A2002111, or L642A2002112 installed.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 6410, Tail rotor blades.

(e) Unsafe Condition

This AD was prompted by a notification of certain parts needing a reduced life

limit when installed on certain model helicopters. The FAA is issuing this AD to prevent certain part-numbered TR blades from remaining in service beyond their fatigue life. The unsafe condition, if not addressed, could result in fatigue and failure of a TR blade and loss of helicopter control.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) For all model helicopters identified in paragraph (c) of this AD, within 350 hours time-in-service (TIS) after the effective date of this AD, determine the total hours TIS of each TR blade P/N L642A2002101 or P/N L642A2002111 in accordance with paragraph 3.B.2 of the Accomplishment Instructions of Airbus Helicopters Alert Service Bulletin ASB EC135H-04A-002, Revision 1, dated December 21, 2020 (ASB EC135H-04A-002) or paragraph 3.B.2 (version A) or 3.B.4 (version B) of the Accomplishment Instructions of Airbus Helicopters Alert Service Bulletin ASB EC135-04A-014, Revision 1, dated December 21, 2020 (ASB EC135-04A-014) as applicable to your model helicopter. Remove from service any TR blade that has accumulated or exceeded 6,800 total hours TIS. For each TR blade that has accumulated less than 6,800 total hours TIS do the following:

(i) Create a component history card or equivalent record to establish a life limit of 6,800 total hours TIS.

(ii) Re-identify each TR blade P/N L642A2002101 as P/N L642A2002104 and re-identify each T/R blade P/N L642A2002111 as P/N L642A2002112 by following paragraph 3.B.5 of the Accomplishment Instructions of ASB EC135H-04A-002, or paragraph 3.B.7 of the Accomplishment Instructions of ASB EC135-04A-014 as applicable to your model helicopter.

(iii) Thereafter, remove from service any TR blade P/N L642A2002104 or P/N L642A2002112 before it accumulates 6,800 total hours TIS.

(2) For Model EC135P1, EC135P2, EC135P2+, EC135T1, EC135T2, and EC135T2+ helicopters with TR blade P/N L642A2002103 that has previously been installed on Model EC135P3 or EC135T3 helicopters, within 350 hours TIS after the

effective date of this AD, determine the total hours TIS of the TR blade in accordance with a method approved by the Manager, General Aviation and Rotorcraft Section, International Validation Branch, FAA; or European Union Aviation Safety Agency (EASA); or Airbus Helicopters' EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) For Model EC135P3 and EC135T3 helicopters within 350 hours TIS after the effective date of this AD, remove from service any TR blade P/N L642A2002103 before exceeding 6,800 total hours TIS.

(4) For Model EC135P3 and EC135T3 helicopters, as of the effective date of this AD, do not install any TR blade P/N L642A2002101, P/N L642A2002103, or P/N L642A2002111 on any helicopter.

(5) For Model EC135P1, EC135P2, EC135P2+, EC135T1, EC135T2, and EC135T2+ helicopters, as of the effective date of this AD, do not install any TR blade P/N L642A2002101 or L642A2002111 that has accumulated or exceeded 500 total hours TIS while installed on a Model EC135P3 or EC135T3 helicopter.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (i)(1) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

(1) For more information about this AD, contact Andrea Jimenez, Aerospace Engineer, COS Program Management Section, Operational Safety Branch, Compliance &

Airworthiness Division, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (516) 228-7330; email andrea.jimenez@faa.gov.

(2) Service information identified in this AD, is available at the contact information specified in paragraphs (j)(3) and (4) of this AD.

(3) The subject of this AD is addressed in European Union Aviation Safety Agency (EASA) AD 2021-0050, dated February 23, 2021. You may view the EASA AD at <https://www.regulations.gov> in Docket No. FAA-2021-0797.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Airbus Helicopters Alert Service Bulletin ASB EC135H-04A-002, Revision 1, dated December 21, 2020.

(ii) Airbus Helicopters Alert Service Bulletin ASB EC135-04A-014, Revision 1, dated December 21, 2020.

(3) For service information identified in this AD, contact Airbus Helicopters, 2701 North Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on November 17, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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